PRELIMINARY IDENTIFICATION OF FACTORS IMPORTANT FOR NAVY OFFICER PROMOTION LINKED TO THE TASK FORCE EXCEL MODEL

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Prepared by:
Jerry W. Hedge, Kenneth T. Bruskiewicz, Walter C. Borman, and Mark J. Bourne

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Personnel Decisions Research Institutes, Inc.
100 South Ashley Drive, Suite 375
Tampa, FL 33602
Phone: (813) 229-6646
www.pdri.com

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Introduction

Currently, the Navy is in the midst of profound changes – philosophical, structural, and technological. Recognizing that fundamentally new ways of thinking and acting will be necessary to meet these dramatic changes, the Chief of Naval Operations chartered an "Executive Review" to develop a strategy for revolutionizing Navy training. The resulting strategy approaches a Sailor's career as a lifelong learning continuum gauged toward producing motivated and well-trained Sailors who possess the knowledge, skills, and abilities to do their jobs (Executive Review of Navy Training, 2001). This revolution has already begun to lead to Navy-wide initiatives that offer great promise -- such as Task Force EXCEL (Task Force for Excellence through Commitment to Education and Learning) and Sea Warrior.

Task Force EXCEL's goal is to provide Sailors the opportunity to succeed and prosper in their professional and personal lives. At the heart of this initiative is what is known as "The Sailor Continuum," forming the foundation around which the Navy will identify the knowledge, skills, and abilities (KSAs) which Sailors need to succeed in today's Navy. The Sailor Continuum incorporates five distinct areas, or "vectors": professional development, personal development, leadership, certifications and qualifications, and job performance. The *Professional Development* vector focuses on a Sailor's ability to acquire job knowledge and skills through such sources as formal schools, correspondence courses, and on-the-job training. *Personal Development* emphasizes "life skills" needed outside the workplace, including physical fitness, core values, and financial-management skills. The *Leadership* vector focuses on the ability of an individual to accomplish the mission as well as mentor and develop others. *Certifications and Qualifications* focuses on unit-level and professional requirements with related industry certifications that are directly tied to job proficiencies. The *Performance* vector focuses on the measurement of a Sailor's workplace performance.

The goal of Sea Warrior is to integrate the Navy's manpower, personnel, and training organizations into a single, efficient, information-rich human resource management system. This system enables the Navy to identify Sailors' precise capabilities and match them to detailed job requirements. Through Sea Warrior, professional development, training and education, and continuous performance feedback are available and visible to every stakeholder on a Sailor's career management team (Harms, Hoewing, & Totushek, 2003).

Strategic Human Capital Management

In recent years, there has been a growing emphasis in the workplace on an organization's 'human capital' as a way to underscore the notion that "people are an organization's most important asset." Certainly, for the Navy, people are an indispensable element in mission accomplishment. They not only play a critical role in determining the organization's performance capabilities, but they also represent its institutional knowledge base and help define its culture. Consequently, maximizing the value of human capital is a function not just of specific actions, but also of cultural transformation. Because there is an obvious link between personnel quality and operational readiness, an organization's approach to strategic human capital management should be judged by how well that vision, strategy, and process help the organization achieve results and pursue its mission.

GAO recently produced a series of reports (e.g., GAO 2002, 2003) examining the strategic management of human capital, and concluded that high performing organizations align their human capital approaches with mission and goal accomplishment. The authors suggested that a high-performance organization needs a dynamic, results-oriented workforce with the talents, knowledge, and up-to-date skills to ensure that it is equipped to accomplish its mission and achieve its goals. They also concluded that in order to foster results-oriented cultures, leading organizations often utilize an effective performance management system as a strategic tool to drive internal change and achieve external results. These organizations also use their performance management systems not merely as yearly expectation and appraisal tools, but as mechanisms to foster communication throughout the year so that discussions about individual and organizational performance are integrated and ongoing.

Recent Work Within the Performance Vector

As part of this Navy cultural and operational transformation, CNO tasked Commander, Navy Personnel Command (CNPC) with developing and implementing a new and improved system for performance development, appraisal, and advancement/promotion of U.S. Navy personnel. In turn, the Task Force Excel Performance Vector was given the responsibility of conducting a scientifically based effort that will completely re-engineer the performance management, performance appraisal, and advancement criteria within the enterprise's core Human Resource Management System (HRMS). This ground-breaking effort affects literally every Sailor in the United States Navy.

During Fiscal Year 2002, the Performance Vector team successfully developed a new performance management and appraisal system for all supervisory and non-supervisory personnel in the U. S. Navy. The new "counseling system" is a fundamental shift from the current trait based system to a behaviorally based *performance management system,* which is now known as the Human

Performance Feedback and Development (HPFD) model. It will transition to Navy's core HRMS for Fleet use by May 04. The *performance appraisal* tool utilizes the behaviors identified in the HPFD model, and consists of one form for supervisory-level personnel and a separate form for non-supervisory-level personnel. Deployment of the new appraisal system is also scheduled for May 05. Information concerning the development of the performance management and appraisal systems for both supervisory and non-supervisory personnel can be found in a recent report by Hedge, Borman, Bruskiewicz, and Bourne (2002).

The Research Plan for Development of an Advancement System

As part of the Task Force Excel transformational revolution, the Performance Vector research team is in the process of developing an *advancement algorithm* that links performance across all five vectors of the Sailor Continuum to advancement to the next paygrade. The algorithm is intended to compute an advancement score based on achievement of defined milestones across all vectors. It will do so by defining the career paths associated with a Sailor's (E-1 through 0-6) professional development, personal development, leadership abilities, certifications and qualifications, and overall performance in the workplace.

This model will quantify the advancement potential for all Enlisted and Officer personnel across every occupation in the U.S. Navy, and will yield data to communicate the advancement potential of an individual to both the Sailor and promotion boards. The new scoring system will translate individual progress in these five vectors into an overall ranking. While the system that is in operation today has been effective, advances in theory and technology should lead to significant improvements in the breadth, depth, and efficiency of the process. The system under development will provide a more comprehensive way of looking at who is 'best and fully qualified', and identify them as the individuals who should advance.

The basic research plan involves a policy capturing study, where workshop participants are presented with profiles of Officer or Enlisted individuals with preset “scores” on the different vectors and asked to rate the promotability of each “person.” Analysis of data from these workshops essentially determines the relative weight of each vector in the advancement algorithm. These relative weights are generated for multiple levels (i.e., junior, mid-grade, and senior) of both Officers and Enlisted personnel. A policy capturing study has already been completed for Enlisted personnel, and the results are contained in a previously released report (see Borman, Hedge, Bruskiewicz, & Bourne, 2003).

Policy Capturing for Navy Officers

Our objective for the current effort, then, was to gather the perspectives of a cross-section of Navy personnel concerning how accomplishments in each of the five vectors contribute to overall Officer promotability. This was achieved by developing profiles of mock Officers with preset "scores" on factors from the different vectors and asking them to rate the promotability of each "person."

During the policy capturing workshops, participants were presented with 120 of these profiles that represent a snapshot of Officer accomplishments or level of performance on each of the five vectors. Different workshops focused on different levels of Officer (e.g., junior, mid-grade, senior), but the 120 profiles were the same for all workshops.

Each profile depicts how that individual was assessed on a 7-point scale (1 = low; 7 = high) regarding accomplishments on each of the 5 vectors. The task of the participants was to review each profile, consider how that individual's score on all of the individual vectors *together* contribute to an evaluation of the Officer's promotability, and then rate their overall level of promotability using the 7-point scale.

Participants were told that when using the 7-point promotability scale, it might be helpful to apply the following rule-of-thumb:

6-7: outstanding accomplishments; definitely promotable
3-4-5: average level of accomplishment; consider promoting
1-2: below average accomplishments; should not be promoted at this time

A sample profile is presented below.

Sample Profile

Vector	Mean	Vector Ratings 1	2	3	4	5	6	7
Professional Development	5.0							
Personal Development	5.9							
Leadership	5.6							
Qualifications and Certifications	6.2							
Performance	4.9							
Overall Promotability for Sample Profile (Please circle your choice):		**1**	**2**	**3**	**4**	**5**	**6**	**7**

Data Collection

Several workshops were conducted to capture the policies of the participants, using the protocol just described. The policy capturing task was done for three levels of promotions for Officer personnel: junior Officers, mid-grade Officers, and senior Officers. To make the task more concrete, we provided participants with a representative rank (and prospective rank) for each of the levels. They were junior Officers = O-2 being considered for 0-3; mid-grade Officers = O-3 being considered for O-4; and senior Officers = O-4 being considered for O5/O6.

Officer Workshops

For two of the three levels, we conducted three workshops. For the third, a single workshop was conducted. The numbers of participants were 35 for junior Officers; 27 for mid-grade Officers; and 26 for senior Officers. Demographics for participating personnel appear in Table 1.

Table 1
Demographics for Officer Workshops

	Junior Officers		Mid-grade Officers		Senior Officers	
	N	Percent	N	Percent	N	Percent
Rank						
W-1	0	0.0	1	3.7	0	0.0
W-2	1	2.9	2	7.4	0	0.0
W-3	1	2.9	0	0.0	0	0.0
O-3	1	2.9	0	0.0	0	0.0
O-4	11	31.4	3	11.1	0	0.0
O-5	14	40.0	9	33.3	2	7.7
O-6	6	17.1	12	44.4	22	84.6
O-8	0	0.0	0	0.0	2	7.7

Table 1 (continued)						
	Junior Officers		**Mid-grade Officers**		**Senior Officers**	
	N	Percent	N	Percent	N	Percent
Location						
AirPac	3	8.6	0	0.0	0	0.0
3rd Fleet Coronado	17	48.6	0	0.0	0	0.0
Bangor Subase	0	0.0	2	7.4	0	0.0
NAS Whidbey Island	0	0.0	1	3.7	0	0.0
Millington	15	42.9	24	88.9	26	100.0
Work Activity						
Aviation	4	11.4	1	3.7	2	7.7
Surface Force	12	34.3	1	3.7	1	3.8
Submarine	0	0.0	2	7.4	1	3.8
Shore-based	1	2.9	2	7.4	16	61.5
Other	18	51.4	21	77.8	6	23.1
Gender						
Male	30	85.7	24	88.9	22	84.6
Female	5	14.3	3	11.1	4	15.4
Ethnic Origin						
American Indian	0	0.0	0	0.0	1	3.8
Asian	0	0.0	0	0.0	2	7.7
Black	1	2.9	1	3.7	2	7.7
Pacific Islander	0	0.0	0	0.0	0	0.0
Spanish/Hispanic	1	2.9	1	3.7	0	0.0
White	32	91.4	24	88.9	21	80.8

Table 1 (continued)						
	Junior Officers		Mid-grade Officers		Senior Officers	
	N	Percent	N	Percent	N	Percent
Educational Background						
High School Diploma/GED	2	5.8	0	0.0	0	0.0
Some College	0	0.0	1	3.7	0	0.0
Two-year College Degree	1	2.9	1	3.7	0	0.0
Four-year College Degree	3	8.6	2	7.4	1	3.8
Some Graduate School	5	14.3	2	7.4	2	7.7
Graduate Degree	24	68.6	21	77.8	23	88.5

Note. Totals may not add to 100 percent due to missing data.

Analyses

Essentially, the policy capturing methodology is a general procedure designed to describe statistically the unique information processing strategies of individual raters. Multiple regression analysis is used to calculate the extent to which overall ratings are predictable given scores on separate dimensions or components (in the current situation, vectors), and the relative importance of each component in determining overall ratings (Naylor & Wherry, 1965).

Thus, the policy capturing analyses provide estimates of each participant's weights for each of the five vectors. These weights can be interpreted as the importance the participant believes should be given to each vector in making promotion decisions at that Officer level. The analyses also provided an index of consistency of policy for each participant. Only 8 of the 88 participants in the Officer study were inconsistent in their policies, and these were dropped in subsequent analyses. This resulted in a total of 9,600 profiles being included for the final analyses.

Results

Table 2 presents the pooled, summary results of the policy capturing study for Officer promotions. As the table indicates, for advancement for junior Officers, job performance was clearly the most important factor, followed by leadership, professional development, and certifications/qualifications. For advancement for mid-grade Officers, performance was still the most important factor, and in fact increased markedly from the previous level. Leadership also increased (but only slightly) from the previous level, while the importance of both professional development and certifications/qualifications dropped (especially for

certifications/qualifications). Finally, regarding advancement for senior Officers, the importance of performance is again the dominant factor, although it has dropped somewhat from its mid-grade high, while leadership increased slightly.

Table 2
Relative Weights for Officer Personnel Advancement

Vector	Junior Officers	Mid-grade Officers	Senior Officers
Professional Development	11.65	8.62	11.48
Personal Development	3.01	1.97	2.01
Leadership	22.97	23.17	26.37
Certifications/Qualifications	11.46	5.03	4.15
Performance	50.92	61.21	55.99

Discussion and Next Steps

The policy capturing research described here provided a scientifically sound approach for pooling the judgment and wisdom of experienced Officers regarding the relative weights that should be placed on each of the Task Force Excel vectors in making advancement decisions. This study provided a way for the Fleet to collectively give us their judgment about advancement policy in the U.S. Navy.

The basic finding was that job performance is overall the most important factor, and continues to be the dominant factor as rank progresses, within the Officer corps. In addition, leadership becomes increasingly important across the three levels, while certifications/qualifications drops consistently across the three levels. Professional development is also an important factor at each stage in a Navy career, but to a lesser degree than either performance or leadership. Finally, personal development was afforded very little importance for the advancement of Officers.

These policy capturing results have produced a preliminary foundation around which an advancement algorithm can be structured that will capture and then operationalize the Fleet's view of advancement policy within the Task Force Excel model. To realize this Fleet vision of advancement, each of the vectors must now identify or develop measures of performance that can be employed to measure success on the vector.

As an example, the performance vector used extensive Fleet input to develop non-supervisory and supervisory models of all important performance-related behaviors that in turn defined comprehensively the performance elements in these two types of jobs. The resulting behavior-based performance categories (e.g., Coaching/Mentoring, Leading Change, and Displaying Organizational Savvy for

the supervisory model) were then used to produce a new performance appraisal system that will provide the metrics for the performance vector. This new system produces a more accurate measure of performance *over time* because it both creates a standard performance score based on the last five years for all Sailors, and normalizes the score across all years and reporting seniors. In addition, these scores are then converted to percentiles for easy interpretation.

Analogously, the leadership vector might identify a number of Navy leadership courses and assign points to them according to the courses perceived to be effective for developing leader skills. Individuals would earn points for performance in the course.

The general point is that each vector must identify or develop indicators of success, as well as accompanying metrics, to score individuals on the vector with enough granularity to provide variability amongst their peer group. When these scoring systems are developed within each vector, overall advancement scores can be computed using the policy capturing results. This approach fully utilizes the individual vectors' scoring systems, but the overall advancement score is computed using the policy weights.

One last point about development of the vectors' algorithms and scoring systems involves how generalizable these algorithm scoring systems might be. The performance vector work was designed from the start to be generalizable, respectively, across all non-supervisory ratings and all supervisory positions. The leadership vector may also find that a single algorithm and scoring system is appropriate for most positions.

However, the remaining three vectors will almost certainly need to tailor these algorithms/scoring systems according to the type of job, perhaps at the associated Center of Excellence level. Thus, the additional challenge for these vectors is to include indicators that are relevant for the content of individual jobs or job groupings, and, at the same time, scored so that the difficulty levels (i.e., how difficult or easy it is to obtain high scores) are similar across different communities and jobs.

Concluding Comments

The policy capturing work provides a framework for advancement algorithms that will reflect the Fleet's conception of what is important for promotion at each level of advancement. The specific advancement algorithms and scoring systems are now ready to be built. What is needed is to identify or develop indicators of success within each vector and equitable scoring systems. The resulting advancement system will be merit based, will represent the Fleet's values of individual effectiveness, and will be consistent with the Task Force Excel model.

The work described in this report is an important part of the Navy's strategic human capital management transformation, and reflects the Navy's drive to adopt a systematic and comprehensive approach to their most important asset – their people. Certainly, a key factor in the success of the Navy's human capital management strategy is the sustained attention of its senior leaders. In addition, however, success will require the linkage of human capital approaches with the accomplishment of organizational goals; implementation of recruiting, selection, training/development, and retention approaches that foster mission accomplishment; and transformation to a results-oriented organizational culture. Obviously, this Navy vision of valuing and investing in its people must be carried through to leaders and managers at all levels of the organization. This cultural transformation is critical in order for the Navy to create the conditions necessary for continuous improvement and high levels of mission accomplishment.

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